

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT: Coni F. Rosati  
ASSIGNEE: Oxyband Technologies, Inc.  
SERIAL NUMBER: 10/781,965 EXAMINER: Not Yet Assigned  
FILING DATE: February 18, 2004 ART UNIT: 3753  
FOR: METHOD AND APPARATUS FOR SUPPLYING GAS TO AN AREA

June 24, 2005  
New York, NY

**PETITION FOR EXPEDITED EXAMINATION**

**MAIL STOP PETITION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicant respectfully requests that the examination of the above-identified patent application be expedited pursuant to 37 C.F.R. § 1.102(d). The fee as set forth under 37 C.F.R. § 1.17(h) is enclosed herein. The Director is authorized to charge any further fees or credit any overpayments to Deposit Account No. 50-0311, Ref. No. 27542-501 UTIL.

Filed concurrently with the present request is a Preliminary Amendment, which presents a new set of claims for examination, as well as a Second Supplemental Information Disclosure Statement (see below).

Accordingly, Applicant hereby requests and submits:

- A. The present Request For Expedited Examination with fee.
- B. A Preliminary Amendment.
- C. An Information Disclosure Statement was filed on September 17, 2004, for the subject application, disclosing references known to the Applicant at that time. Applicant notes that references A4, A8, C1, C2, C3 and C10, as listed on the corresponding PTO-1449 form, are not related to claims as presented in the Preliminary Amendment, but a discussion of each is included in the present Petition. Applicant also notes that item no. A3 ("4,875,483") listed on the PTO-1449 form is incorrect. The correct patent number should be 4,875,473.
- D. A Supplemental Information Disclosure Statement was filed on April 15, 2004, for the subject application, to disclose additional references, not yet disclosed, found in a search conducted by the International Searching Authority (US) for counterpart PCT application.
- E. A subsequent pre-examination patentability search has also now been conducted in the following fields of search:

<u>Class</u>	<u>Subclass</u>
128	202.12, 202.13, 846
602	2, 41, 42
604	20, 23, 24, 34, 205 289, 290, 293, 304-308, 890.1
607	96

- E. A Second Supplemental Information Disclosure Statement citing the references found in the patentability search, as well as some additional references known to applicant prior to the search, and not disclosed in the September 17, 2004, or April 15, 2005 Information Disclosure Statements.

F. Under 37 CFR § 1.98 (a)(2)(i), copies of the cited U.S. patents and U.S. publications are identified on the MODIFIED FORM 1449/PTO are not enclosed for the Second Supplemental Information Disclosure Statement.

G. In the Preliminary Amendment, claims 1-57 were canceled, without prejudice and/or disclaimer of subject matter. Claims 58-103 are now presented, with claims 58, 100, 101 and 102 being independent. Each independent claim is set out below:

58. A tissue dressing apparatus for supplying one or more gases to a target area, comprising a top layer and a bottom layer sealed around the perimeter of the layers to form a reservoir between the layers, wherein the top layer has gas barrier properties and the bottom layer has gas transfer properties, and the reservoir is packaged with one or more predetermined gases.

100. A tissue dressing apparatus for supplying one or more gases to a target area, comprising a top layer, an absorbent layer and a bottom layer sealed around the perimeter of the layers to form a reservoir between the top and bottom layers, wherein the top layer has gas barrier properties, the bottom layer has gas transfer properties and the absorbent layer is attached to the bottom layer, and the reservoir is packaged with one or more predetermined gases.

101. A tissue dressing apparatus for supplying one or more gases to a target area, comprising a top layer, an absorbent layer, a bottom layer and a gel layer sealed around the perimeter of the layers to form a reservoir between the top and bottom layers and filled with the absorbent layer, said reservoir is packaged with one or more predetermined gases, wherein

the top layer has gas barrier properties,

the absorbent layer is attached to the bottom layer and has high gas transfer properties,

the bottom layer has gas transfer properties, and

the gel layer is attached to the bottom layer and contacts the target area.

102. A tissue dressing apparatus for supplying one or more gases to a target area, comprising a top layer having gas barrier properties and an adhesive layer, wherein the adhesive layer having gas barrier properties is attached to the perimeter of the top layer, such that the adhesive layer adheres to the surface around the target area, forming a reservoir between the top layer and the target area such that the adhesive layer comprises the sides of the reservoir, wherein after application of the apparatus to a target area, the reservoir is filled with one or more predetermined gases according to a predetermined ratio via an external source, and wherein the external source is removed once the reservoir is filled with the one or more predetermined gases according to the predetermined ratio.

H. Applicant submits a detailed discussion of references disclosed in the initial Information Disclosure Statement of September 17, 2004, the Supplemental Information Disclosure Statement of April 15, 2005, and the Second Supplemental Information Disclosure Statement filed herewith:

1. U.S. Patent No. 3,610,238

U.S. patent no. 3,610,238 ("the '238 patent"), is directed to a wound prevention treatment device consisting of a cellular foam plastic bag encased by plastic sheets. Air is fed under pressure over the wound to prevent the setting of bacteria-bearing dust on the wound.

The '238 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '238 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

2. U.S. Patent No. 3,742,951

U.S. patent no. 3,742,951 ("the '951 patent"), is understood to disclose a bandage for controlled release of coronary vasodilators. The bandage consists of a backing member, pressure-sensitive adhesive coating, and a plurality of microcapsules containing coronary vasodilator.

The '951 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '951 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

3. U.S. Patent No. 3,996,934

U.S. patent no. 3,996,934 ("the '934 patent"), is understood to be directed to a bandage for continuously administering controlled quantities of systemically active drugs through the skin.

The '934 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '934 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

4. U.S. Patent No. 4,003,371

U.S. patent no. 4,003,371 ("the '371 patent") is understood to be directed to a portable, low pressure hyperbaric chamber for enclosing a portion of the body (e.g., the lower leg), for treatment with oxygen or other gas at pressures above atmospheric.

The '371 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '371 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

5. U.S. Patent No. 4,201,211

U.S. patent no. 4,201,211 ("the '211 patent"), is understood to disclose a skin patch that administers clonidine transdermally in an initial priming dose of 10 to 300 mcg/cm<sup>2</sup> of skin that brings the concentration of clonidine in the blood to a level sufficient to elicit alpha-adrenergic stimulation without intolerable side effects, followed by a substantially constant continuous dosage in the range of 0.1 to 100 mcg/hr that maintains said level.

The '211 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '211 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

6. U.S. Patent No. 4,211,223

U.S. patent no. 4,211,223 (“the ‘223 patent”) is understood to disclose a treatment chamber utilizing a pulsed or hyperbaric oxygen supply. The chamber consists of upper and lower sections clamped together and provided at one end, with a single annular sleeve, and at the other end, a pair of annular sleeves to seal against adjacent body surfaces (e.g., thighs and midriff, respectively).

The ‘223 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘223 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

7. U.S. Patent No. 4,224,941

U.S. patent no. 4,224,941 (“the ‘941 patent”) is understood to disclose a disposable hyperbaric treatment device which consists of an adhesive backed pad having an opening for framing a treatment region and a flaccid bag secured to the top surface of the pad to receive pressurized gas.

The ‘941 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘941 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

8. U.S. Patent No. 4,236,513

U.S. patent no. 4,236,513 (“the ‘513 patent”) is understood to disclose a treatment chamber utilizing a pulsed or hyperbaric oxygen supply. The chamber consists of upper and lower sections clamped together and provided at one end, with a single annular sleeve to seal against a body surface (e.g., a leg).

The ‘513 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘513 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

9. U.S. Patent No. 4,328,799

U.S. patent no. 4,328,799 (“the ‘799 patent”), is understood to disclose a hyperbaric oxygen treatment apparatus for use by a patient lying on a bed. Specifically, the device disclosed in the ‘799 patent consists of an openface chamber and an adjustable rigid support, having a closed rear side and an open front side. The rear side of the chamber is provided with fittings for connection to the support and to a controlled source of oxygen.

The ‘799 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘799 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.



10. U.S. Patent No. 4,432,354

U.S. patent no. 4,432,354 ("the '354 patent"), is understood to disclose a portable chamber for enclosing a portion of the body for treatment with oxygen or other gas at pressures slightly above atmospheric. The chamber is designed to enclose a portion of the body, such as a leg or arm, or the entire body (except the head) of the patient.

The '354 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '354 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

11. U.S. Patent No. 4,296,743

U.S. patent no. 4,296,743 ("the '743 patent"), is understood to disclose a portable chamber for enclosing a portion of the body for treatment with oxygen or other gas at pressures slightly above atmospheric and the control circuits for operating the chamber.

The '743 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '743 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

12. U.S. Patent No. 4,460,368

U.S. patent no. 4,460,368 ("the '368 patent"), is directed to a medication application system comprising a container for medication adhesively secured to the unbroken skin of a patient.

The '368 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '368 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

13. U.S. Patent No. 4,474,571

U.S. patent no. 4,474,571 ("the '571 patent"), is directed to a portable topical hyperbaric chamber assembly for covering a surface portion of the patient's body for treatment with pressurized oxygen.

The '571 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '571 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

14. U.S. Patent No. 4,624,656

U.S. patent no. 4,624,656 ("the '656 patent"), is directed to a hyperbaric gas treatment device for therapeutic topical treating of a skin lesion at the body part.

The '656 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '656 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

15. U.S. Patent No. 4,747,841

U.S. patent no. 4,747,841 ("the '841 patent"), is directed to a method and apparatus for moxibustion. Air is fed to a heat generating composition in contact with a herb material comprising moxa, where the heat generating composition comprises pyrogen. The herb material is located adjacent to a skin surface, where the fed air causes the pyrogen to generate heat by oxidation. The herb material is then heated and vaporized, which then acts on the skin causing a moxibustion effect.

The '841 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '841 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

16. U.S. Patent No. 4,801,291

U.S. patent no. 4,801,291 ("the '291 patent"), is directed to a topical hyperbaric apparatus. The apparatus comprises a shell having at least one flexible wall portion which provides an external surface and defines a substantially closed internal chamber.

The '291 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '291 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

17. U.S. Patent No. 4,839,345

U.S. patent no. 4,839,345 ("the '345 patent"), is directed to a hydrated adhesive gel. The '345 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '345 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

18. U.S. Patent No. 4,875,473

U.S. patent no. 4,875,473 ("the '473 patent"), is directed to a multi-layer wound dressing.

The '473 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '473 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

19. U.S. Patent No. 4,895,729

U.S. patent no. 4,895,729 ("the '729 patent"), is directed to a method of preserving fresh fruit.

The '729 patent fails at least to disclose a medical wound apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '729 patent also fails at least to disclose a medical wound apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

20. U.S. Patent No. 4,906,463

U.S. patent no. 4,906,463 ("the '463 patent") is directed to a laminated composite product for administering a drug transdermally.

The '463 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '463 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a

predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

21. U.S. Patent No. 4,969,881

U.S. patent no. 4,969,881 (“the ‘881 patent”) is directed to a disposable hyperbaric oxygen device. The device consists of a thin flexible clear plastic film, defining a square, and a rigid hollow square shaped flat plastic member having an open cell structure. A hollow tube extends from the outside of the member into the central opening. Oxygen is supplied to the outer end of the tube via oxygen feed line.

The ‘881 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘881 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

22. U.S. Patent No. 5,008,110

U.S. patent no. 5,008,110 (“the ‘110 patent”) is directed to a device for transdermally administering an active pharmaceutical to a patient.

The ‘110 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘110 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

23. U.S. Patent No. 5,029,579

U.S. patent no. 5,029,579 ("the '579 patent") is directed to a hyperbaric oxygenation apparatus which consists of a chamber in the form of a disposable inflatable bag of impervious synthetic resinous material.

The '579 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '579 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

24. U.S. Patent No. 5,154,697

U.S. patent no. 5,154,697 ("the '697 patent"), is directed to a topical hyperbaric apparatus for treating wounds. The hyperbaric apparatus includes a shell constructed of flexible plastic material which provides a substantially closed internal chamber, which may be expanded or collapsed.

The '697 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '697 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

25. U.S. Patent No. 5,308,887

U.S. patent no. 5,308,887 (“the ‘887 patent”), is directed to silicone/acrylic based pressure sensitive adhesives.

The ‘887 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘887 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

26. U.S. Patent No. 5,336,209

U.S. patent no. 5,336,209 (“the ‘209 patent”), is directed to a protective wound bandage including a non-stick surface for contact with the wound and an absorbent pad for body fluid drainage.

The ‘209 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘209 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

27. U.S. Patent No. 5,354,790

U.S. patent no. 5,354,790 (“the ‘790 patent”), is directed to methods for preparing non-stringy hydrogels consisting of homogeneous uniform mixture of water and at least one water-soluble high molecular weight polymer.



The '790 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '790 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

28. U.S. Patent No. 5,478,310

U.S. patent no. 5,478,310 ("the '310 patent"), is directed to a disposable hyperbaric oxygen chamber consisting of a polyethylene bag having a length of a patient's leg, for placement around the entire leg and thigh.

The '310 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '310 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

29. U.S. Patent No. 5,487,889

U.S. patent no. 5,487,889 ("the '889 patent"), is directed to a bandage which includes an envelope enclosing cells which secrete biologically active cellular products such as growth factors, which promote the healing of wounds.

The '889 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '889 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a

target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

30. U.S. Patent No. 5,578,022

U.S. patent no. 5,578,022 ("the '022 patent"), is directed to an oxygen producing bandage which includes a dressing that incorporates an electrochemical, chemical, or thermal means of generating high purity oxygen.

The '022 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '022 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

31. U.S. Patent No. 5,583,114

U.S. patent no. 5,583,114 ("the '114 patent"), is directed to an adhesive composition formed from a two component mixture which includes a first part of a protein, preferably a serum albumin protein, in an aqueous buffer having a pH in the range of about 8.0-11.0 and a second part of a water-compatible or water-soluble bifunctional crosslinking agent.

The '114 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '114 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a

predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

32. U.S. Patent No. 5,662,625

U.S. patent no. 5,662,625 ("the '625 patent"), is directed to a hyperbaric device to treat a wound with therapeutic gas to expedite healing. The device consists of a flexible gas impermeable sheet of material which is used to confine a therapeutic gas to a restricted gas treatment zone, and means to affix the device.

The '625 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '625 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

33. U.S. Patent No. 5,788,682

U.S. patent no. 5,788,682 ("the '682 patent"), is directed to a device for controlling oxygen concentration in an environment around a wound. The device includes components for electrochemical production of an ionic species at an electrode, transport of the ionic species across an ion permeable membrane, and reaction of the ionic species at a second electrode to be converted to a molecule which results in a net change of concentration of oxygen adjacent to the wound.

The '682 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '682 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a

predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

34. U.S. Patent No. 5,572,090

U.S. patent no. 5,792,090 ("the '090 patent"), is directed to an oxygen-generating wound dressing which chemically generates oxygen.

The '090 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '090 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

35. U.S. Patent No. 5,855,570

U.S. patent no. 5,855,570 ("the '570 patent"), is directed to an oxygen producing bandage. The bandage consists of a wound dressing that incorporates an electrochemical, chemical, or thermal means of generating high purity oxygen, using a built in or accessory power source.

The '570 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '570 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

36. U.S. Patent No. 5,865,722

U.S. patent no. 5,865,722 ("the '722 patent"), is directed to a disposable hyperbaric oxygen chamber which is constructed of a flexible, thin-walled, polyethylene plastic bag sized to permit entry of an entire body of an animal. The wall of the bag includes at least one gas supply connector for connecting with a gas supply tube.

The '722 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '722 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

37. U.S. Patent No. 6,000,403

U.S. patent no. 6,000,403 ("the '403 patent"), is directed to a hyperbaric bandage where oxygen is generated by releasing hydrogen peroxide onto a catalyst impregnated dressing.

The '403 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '403 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

38. U.S. Patent No. 6,284,941

U.S. patent no. 6,284,941 ("the '941 patent"), is directed to a bandage having a flexible member including a first side and a second side and further having an adhesive

located on the first side. A pad, such as a layer of silicone elastomer, is attached by the adhesive to the first side of the flexible member. The adhesive removably attaches the first side of the flexible member to the skin of the user.

The '941 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '941 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

39. U.S. Patent No. 6,432,077

U.S. patent no. 6,432,077 ("the '077 patent"), is directed to a device for the topical delivery of nitric oxide gas to an infected area of skin. The device includes a source of nitric oxide gas, a bathing unit, a flow control valve, and a vacuum unit.

The '077 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '077 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

40. U.S. Patent No. 6,458,109

U.S. patent no. 6,458,109 ("the '109 patent"), is directed to a device for the topical delivery of nitric oxide gas to an infected area of skin. The device includes a source of nitric oxide gas, a bathing unit, a flow control valve, and a vacuum unit.

The '109 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '109 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

41. U.S. Patent No. 6,465,708

U.S. patent no. 6,465,708 ("the '708 patent"), is directed to a covering for skin which includes a peripheral sealing ring covered by a barrier layer for attachment to the skin with an adhesive.

The '708 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '708 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

42. U.S. Patent No. 6,465,709

U.S. patent no. 6,465,709 ("the '709 patent"), is directed to a multi-layer exothermic bandage which includes an oxygen-impermeable layer, a water-impermeable layer, a heating element layer, and an active agent layer.

The '709 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '709 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a

target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

43. U.S. Patent No. 6,471,685

U.S. patent no. 6,471,685 ("the '685 patent"), is directed to a medical dressing assembly including an isolating member, a member for controllably inputting matter and a member for controllably exhausting matter.

The '685 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '685 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

44. U.S. Patent No. 6,572,594

U.S. patent no. 6,572,594 ("the '594 patent"), is directed to a device for application of a treatment gas to a surface of the skin and simultaneous neuro-muscular stimulation of the skin.

The '594 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '594 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.



45. U.S. Patent No. 6,767,342

U.S. patent no. 6,767,342 (“the ‘342 patent”), is directed to an oxygen generating a bandage consisting of first and second sterile pads attached to a covering with an adhesive backing.

The ‘342 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘342 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

46. U.S. Published Patent Application No. 20010020146

U.S. published patent application no. 20010020146 (“the ‘146 application”), is a method of treating skin including the application of a treatment gas to a surface of the skin and simultaneous neuro-muscular stimulation of the skin.

The ‘146 application fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘146 application also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

47. U.S. Published Patent Application No. 20040116770

U.S. published patent application no. 20040116770 (“the ‘770 application”), is directed to a controlled environment device for surgical procedures, transplantation and wound healing, providing an anaerobic environment

The '770 application fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '770 application also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

48. United Kingdom GB 2,395,906

GB 2,395,906 ("the '906 patent") is directed to a wound dressing which includes an enzymatic compound or reagent used to reduce a concentration of lactate in an aqueous solution in contact with the dressing.

The '906 patent fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '906 patent also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

49. PCT Publication No. WO03/003989

PCT publication no. WO03003989 ("the '989 publication") is directed to a wound device consisting of a housing, a corona and/or ultra-violet light generating member, a ultrasonic wave generator, and a photoactivatable material.

The '989 publication fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The '989 publication also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a

reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

50. PCT Publication No. WO03/049660

PCT publication no. WO03049660 (“the “660 publication”) is directed to a device for applying oxygen to a wound. The device consists of a portable oxygen generator which includes a cathode, an anode, and a phosphoric acid treated ion conducting membrane.

The ‘660 publication fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The ‘660 publication also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

51. Weber, Claus J., “Biobased Packaging Materials for the Food Industry

The article entitled, “Biobased Packaging Materials for the Food Industry” (“the Weber Article”) is directed biobased materials for packaging to replace petroleum based products.

The Weber Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Weber Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

52. Brody, Aaron L., "What's Active in Active Packaging"

The article entitled, "What's Active in Active Packaging" ("the Brody Article") is directed to discussions on active packaging.

The Brody Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Brody Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

53. Devlieghere, F. et al., "Modified atmosphere packaging: state of the art"

The article entitled, "Modified atmosphere packaging: state of the art" ("the Devlieghere et al. Article") is directed to discussions on modified atmospheric packaging.

The Devlieghere et al. Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Devlieghere et al. Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

54. Eaglstein, W., "Experiences with Biosynthetic Dressings"

The article entitled, "Experiences with Biosynthetic Dressings", by William Eaglstein (the Eaglstein Article) is an article that compares oxygen-permeable and oxygen-nonpermeable occlusive dressings, demonstrating those that are more permeable to oxygen and better for wound healing than those that block oxygen from getting to the wound.

The Eaglestein Article fails at least to disclose a medical wound apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Eaglestein Article also fails at least to disclose a medical wound apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

55. Fischer, B., "Treatment of Ulcers on the Legs with Hyperbaric Oxygen"

The article entitled, "Treatment of Ulcers on the Legs with Hyperbaric Oxygen" by Boguslav Fischer ("the Fischer Article"), discusses the use of topical hyperbaric oxygen treatment for improving epithelialization and contraction of decubitus ulcers using a topical hyperbaric chamber operating at elevated pressure.

The Fischer Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Fischer Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

56. Gruber, R.P. et al., "Skin Permeability to Oxygen and Hyperbaric Oxygen"

The article entitled, "Skin Permeability to Oxygen and Hyperbaric Oxygen" by R.P. Gruber et al., ("the Gruber et al. Article"), discusses that the skin is relatively impermeable to oxygen, although oxygen levels increase at 3 bar of 100% oxygen in the superficial dermis, while the relative oxygen concentration of the deep dermis is unchanged under the same conditions.

The Gruber et al. Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Gruber et al. Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

57. Heng et al., “A Simplified Hyperbaric Oxygen Technique for Leg Ulcers”

The article entitled, “A Simplified Hyperbaric Oxygen Technique for Leg Ulcers” (“The Heng et al. Article”) describes a technique for administering hyperbaric oxygen with use of disposable polyethylene bags.

The Heng et al. Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Heng et al. Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

58. Hoogerwerf et al., “A Simplified Hyperbaric Oxygen Technique for Leg Ulcers”

The article entitled, “A Simplified Hyperbaric Oxygen Technique for Leg Ulcers” by Hoogerwerf et al., (“the Hoogerwerf et al. Article”), describes a simple hyperbaric oxygen treatment chamber of a polyethylene bag secured to the body or extremity with adhesive tape, which is pressurized to supply oxygen via an externally tethered oxygen tank.

The Hoogerwerf et al. Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in

claims 58, 100 and 101. The Hoogerwerf et al. Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

59. Kaufman, et al, "Topical Oxygen and Burn Wound Healing: a review"

The article entitled, "Topical Oxygen and Burn Wound Healing: a review" by Kaufman et al., ("the Kaufman et al. I Article"), is a review of oxygen's positive effects on wound healing, disclosing data demonstrating a continuum in wound healing improvement when changing humidified oxygen levels.

The Kaufman et al. I Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Kaufman et al. I Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

60. Niinikoski, J., "Oxygen and Wound Healing"

The article entitled, "Oxygen and Wound Healing" by Juha Niinikoski ("the Niinikoski Article"), discusses the suggestion that collagen accumulation in the dead space of animal wounds increases with oxygen concentration of the environment.

The Niinikoski Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Niinikoski Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases

according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

61. Labell, Fran, "Controlled & Modified atmospheric packaging"

The article entitled, "Controlled & Modified atmospheric packaging" ("the Labell Article") is directed to discussions on controlled and modified atmospheric packaging.

The Labell Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Labell Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

62. Niinikoski, J. et al., "Combination of Hyperbaric Oxygen, Surgery, and Antibiotics in the Treatment of Clostridial Gas Gangrene"

The article entitled, "Combination of Hyperbaric Oxygen, Surgery, and Antibiotics in the Treatment of Clostridial Gas Gangrene" by Niinikoski et al. ("the Niinikoski et al. Article"), discusses the addition of hyperbaric oxygen therapy to the standard treatment of surgical debridement and antibiotics for clostridial gas gangrene for reducing morbidity and mortality rates.

The Niinikoski et al. Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Niinikoski et al. Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.



63. Olejniczak, S., et al., “Topical Oxygen Promotes Healing of Leg Ulcers”

The article entitled, “Topical Oxygen Promotes Healing of Leg Ulcers” by Olejniczak et al. (“the Olejniczak et al. Article”), discusses the use of topical Oxygen via a transparent nylon bag with straps and VELCRO closure where oxygen is pumped over a wound using an external gas cylinder.

The Olejniczak et al. Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Olejniczak et al. Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

64. Kaufman et al., “Acceleration of Wound Healing and Contraction of Experimental Deep Burns by Topical Oxygen (*Proceedings of the 39<sup>th</sup> Annual Sessions of the Forum of Fundamental Surgical Problems*, American College of Surgeons, Atlanta, Georgia, October 1983)

The article entitled, “Acceleration of Wound Healing and Contraction of Experimental Deep Burns by Topical Oxygen” by Kaufman et al. (“the Kaufman et al. II Article”), discusses the use of topical Oxygen, using a microclimate chamber.

The Kaufman et al. II Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Kaufman et al. II Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

65. Prockop D., et al., "Oxygen-18 Studies on the Conversion of Proline to Collagen Hydroxyproline"

The article entitled, "Oxygen-18 Studies on the Conversion of Proline to Collagen Hydroxyproline" by Prockop, D. et al. ("the Prockop et al. Article"), discusses the enhancement of collagen synthesis under hyperoxic rather than hypoxic conditions.

The Prockop et al. Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Prockop et al. Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

66. Silver, I.A., "Oxygen Tension and Epithelialization"

The article entitled, "Oxygen Tension and Epithelialization" by I.A. Silver ("the Silver I Article"), discusses the importance of oxygen for wound healing.

The Silver I Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Silver I Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

67. Silver, I.A., "The Physiology of Wound Healing"

The article entitled, "The Physiology of Wound Healing" by I.A. Silver ("the Silver II Article"), discusses wound healing based on control of the local environment being dependent on the local blood supply and diffusion of oxygen from the atmosphere.

The Silver II Article fails at least to disclose a medical wound apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Silver II Article also fails at least to disclose a medical wound apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

68. Transcript of the US FDA, Center for Drug Evaluation & Research, Dermatologic and Ophthalmic Drugs Advisory Committee, 46<sup>th</sup> Meeting, July 14, 1997, pp. 15-28

The transcript from this meeting discuss chronic wounds and that ischemia compromises wound healing.

The transcript fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The transcript also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

69. Utkina, O., Biological Abstracts 45:6289, Abstract No. 78585

This abstract by O. Utkina ("the Utkina Abstract") discusses moderate increases in oxygen levels at normal atmospheric pressure increase the closure rate of open wounds.

The Utkina Abstract fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Utkina Abstract also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

70. Whitney, J., "Physiological Effects of Tissue Oxygenation on Wounds"

The article entitled, "Physiological Effects of Tissue Oxygenation on Wounds", by J. Whitney ("the Whitney Article") describes oxygen's role in wound healing.

The Whitney Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Whitney Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

71. Winter, G., "Advances in Exp. Medicine and Bio"

The article entitled, "Advances in Exp. Medicine and Bio", by G. Winter ("the Winter Article"), discusses that oxygen reaches the epidermal cells directly by diffusion through a scab rather than via the vascular or tissue supply. Wounds covered with plastic films were investigated with the findings that the higher the oxygen permeability of the film, the greater the healing rate.

The Winter Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Winter Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a

target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

72. Winter et al., Proceedings of the 4<sup>th</sup> Int. Congress on Hyperbaric Medicine, pp. 363-368

This paper (“the Winter Paper”) discusses the speed of epidermal migration on wound healing with regard to available oxygen.

The Winter Paper fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Winter Paper also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

73. Zhao, et al., “Effect of Hyperbaric Oxygen and Growth Factors on Rabbit Ear Ischemic Ulcers”

The article entitled, “Effect of Hyperbaric Oxygen and Growth Factors on Rabbit Ear Ischemic Ulcers” by Zhao et al. (“the Zhao et al. Article”) the need of oxygen for the healing of wounds.

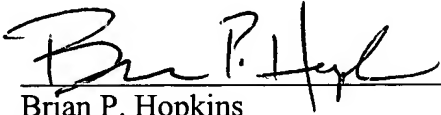
The Zhao et al. Article fails at least to disclose a tissue dressing apparatus which includes a reservoir packaged with one or more predetermined gases, as claimed in claims 58, 100 and 101. The Zhao et al. Article also fails at least to disclose a tissue dressing apparatus including a top layer with gas barrier properties which forms a reservoir with a target area which is filled with one or more predetermined gases according to a predetermined gas ratio via an external source, where the external source is removed once the reservoir is filled, as recited in claim 102.

**CONCLUSION**

On the basis of the foregoing, Applicant respectfully requests the granting of this Request For Expedited Examination and respectfully solicit favorable examination at that time.

Respectfully submitted,

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